

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) Cast part with high creep resistance, made of an alloy with a composition comprising (% by weight):

Si: 5 - 11

Fe at most 0.3

Mg 0.15 - 0.6

Cu: 0.3 - 1.5

Ti: 0.05 – 0.25

Zr: 0.05 – 0.25

Mn <0.4

Zn <0.3

Ni <0.4

other elements <.10 each and 0.30 total, remainder aluminum.

2. (previously presented) Part according to claim 1, wherein silicon is from 6.5 to 7.5%

3. (cancelled)

4. (previously presented) Part according to claim 1, wherein copper is from 0.4 to 0.7%.

5. (previously presented) Part according to claim 1, wherein magnesium content is from 0.25 to 0.5%.

- 6 (previously presented) Part according to claim 1, wherein magnesium and copper are present such that $0.3\text{Cu} + 0.18 < \text{Mg} < 0.6$.

7. (previously presented) Part according to claim 1, wherein titanium is from 0.08 to 0.20%.
8. (previously presented) Part according to claim 1, wherein zirconium is from 0.12 to 0.18%.
9. (previously presented) Part according to claim 1, wherein manganese is from 0.1 to 0.3%.
10. (previously presented) Part according to claim 1, wherein zinc is at most 0.1%.
11. (previously presented) Part according to claim 1, wherein nickel is at most 0.1%.
12. (previously presented) Part according to claim 1, wherein said part is solution heat treated, quenched and tempered to T6 or T7.
13. (previously presented) Part according to claim 1, wherein said part is a cylinder head or a crankcase of an automobile or aircraft engine.
14. (cancelled)
15. (previously presented) Part according to claim 2, wherein the copper is from 0.4% to 0.7%.
16. (previously presented) Part according to claim 3, wherein copper is from 0.4% to 0.7%.
17. (previously presented) Part according to claim 2, wherein magnesium is from 0.25 to 0.5%.

18. (previously presented) Part according to claim 3, wherein magnesium is from 0.25 to 0.5%.

19. (previously presented) Part according to claim 4, wherein magnesium is from 0.25 to 0.5%.

20. (previously presented) Part according to claim 2, wherein magnesium and copper are present such that $0.3\text{Cu} + 0.18 < \text{Mg} < 0.6$.

21. (previously presented) Cast part with high creep resistance, made of an alloy with a composition consisting essentially of (% by weight):

Si: 5 - 11

Fe at most 0.3

Mg 0.15 - 0.6

Cu: 0.3 - 1.5

Ti: 0.05 – 0.25

Zr: 0.05 – 0.25

Mn <0.4

Zn <0.3

Ni <0.4

other elements <10 each and 0.30 total, remainder aluminum.

22. (new) Part according to claim 21, wherein the creep strain (ϵ) at a stress of 40MPa and a temperature of 250°C is not greater than: 0.078%, after 100 hours, 0.18% after 200 hours, and 0.31% after 300 hours.

23. (new) Part according to claim 21, wherein the creep strain (ϵ) at a stress of 40MPa and a temperature of 250°C is not greater than: 0.098%, after 100 hours, 0.48% after 200 hours, and 1.20% after 300 hours.